

REMARKS

This paper is filed in response to the office action mailed on November 18, 2003.

Claim 6 has been canceled; claims 1, 3 and 4 have been amended; claims 1-5 remain pending.

The specification has been amended for purposes of clarity and to correct translational errors. No new matter is added thereby.

All claims stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,468,926 ("Irino"). In response, applicants present the following remarks.

At the outset, applicants respectfully submit that Irino cannot serve as an anticipating reference for the following reasons. Under M.P.E.P. § 2131,

[t]o anticipate a claim, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Citing, Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

To serve as an anticipating reference, Irino needs to teach or suggest all of the elements of independent claim 1. Irino does not.

Specifically, claim 1, as presently amended, requires that after the nitrification process is stopped and the flow of nitrogen based source gas is stopped, that the temperature of the oxidation furnace is raised to a higher temperature than the temperature at which the nitrification process is implemented before a rapid cooling is carried out while simultaneously injecting inert gas into the furnace. Thus, claim 1 requires carrying out a nitrification process, stopping the flow of the source gas, raising the temperature prior to a rapid cooling while injecting inert gas into the furnace thereby purging the nitrogen source gas.

Irino clearly does not teach or suggest this method as shown in Fig. 2. The nitrification process is carried out at a stable temperature of about 900°C before a cooling step is carried out. See also claim 3 which "requires lowering the temperature" immediately after the nitrification step recited in claim 1 without an intervening annealing or heating step as recited in claim 1.



Support for the amendment and an explanation of the purpose behind this raising of the temperature or annealing process carried out after the nitrification process as set forth in the specification from page 8, line 18 through page 9, line 10. The process of increasing the furnace temperature to an annealing temperature higher than the nitrification temperature and subsequent rapid cooling under an inert atmosphere prevents reproduction of the trap charge while also avoiding warping of the wafer notwithstanding the large temperature variations.

Nowhere in Irino is the concept of raising the temperature of the furnace after the nitrification process followed by a subsequent cooling under an inert atmosphere taught or suggested. Therefore, Irino cannot serve as an anticipating reference and the rejection does not meet the standards of § 2131.

Accordingly, applicants respectfully submit that the rejection be withdrawn and that this application be passed to allowance.

If the examiner has any further questions regarding this application, he is invited to telephone the undersigned at the number listed below.

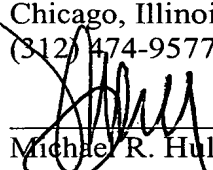
The Commissioner is authorized to charge any fee deficiency required by this paper, or credit any overpayment, to Deposit Account No. 13-2855.

Respectfully submitted,

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By:


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